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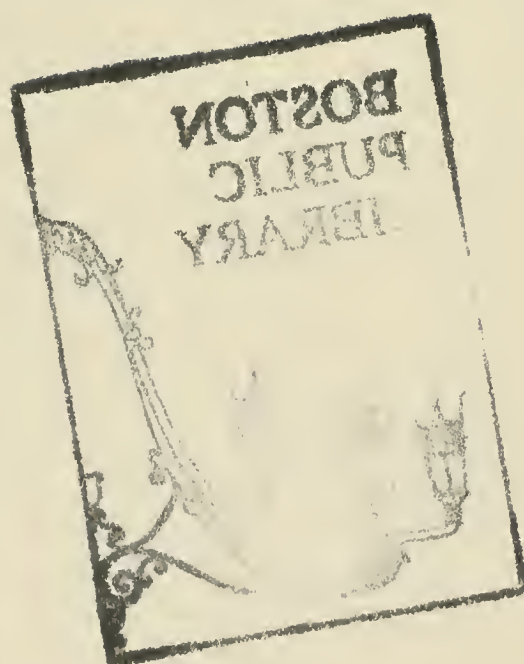
# State Transportation Projects

WASHINGTON STREET

GOVDOC  
BRA  
4177

BIND





## 2.0 STATE TRANSPORTATION PROJECTS

### 2.1 Background

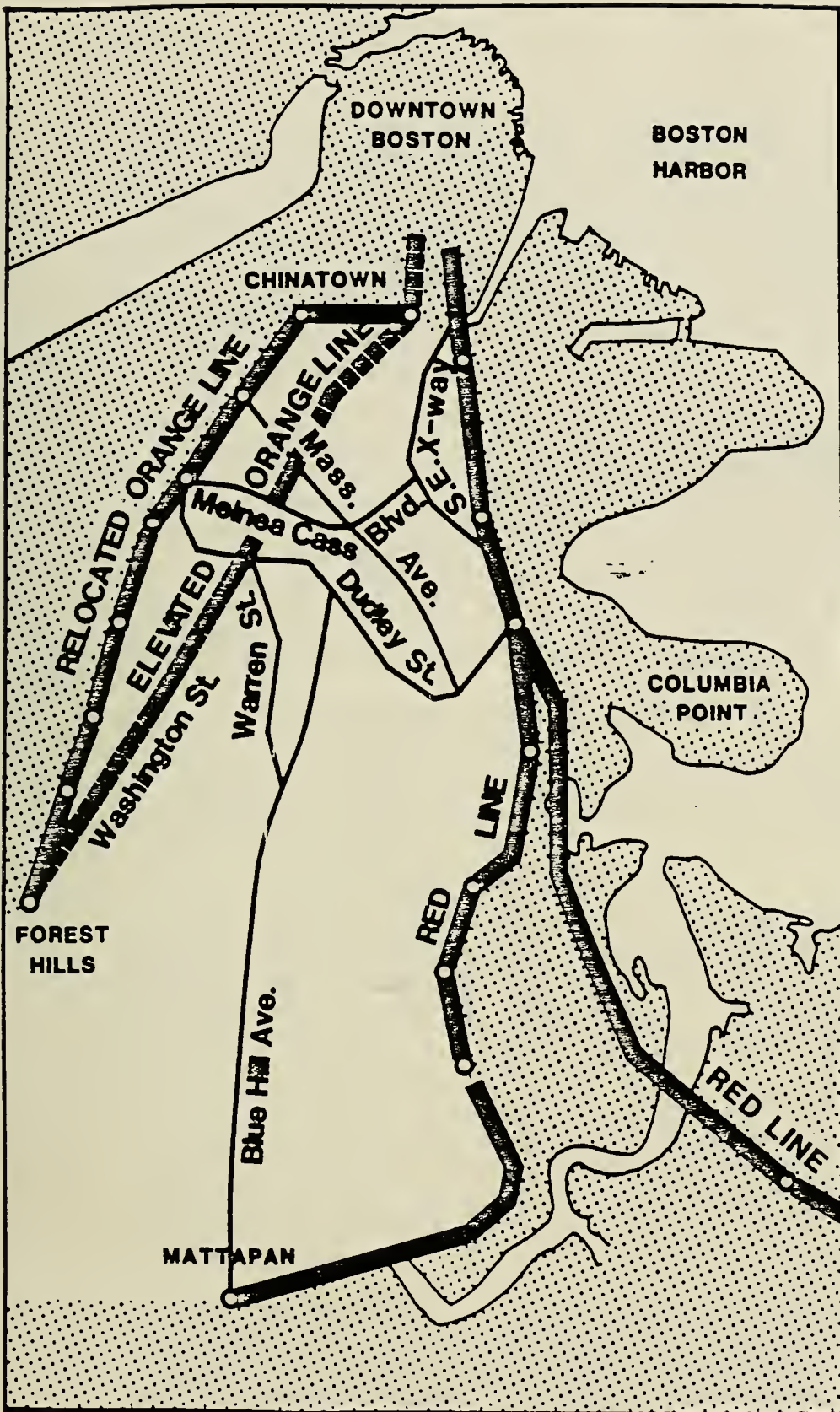
In 1972 Governor Francis Sargent halted construction of the proposed Southwest Expressway and decided to relocate the Orange Line in the corridor already cleared for the road. As planning began for the new Southwest Corridor, the state made the commitment to provide replacement service along Washington Street from Dudley Square through the South End and Chinatown.

The Orange Line will continue to terminate at Forest Hills, but the line will shift slightly to the northwest and rejoin the existing Orange Line alignment at Essex Station. The new stops are: Forest Hills, Green Street, Stony Brook, Jackson Square, Roxbury Crossing, Ruggles Street, Massachusetts Avenue, Back Bay, Chinatown (see map). Service will begin in the spring of 1987.

Relocating the Orange Line to the Southwest Corridor raised a series of questions about economic development and bus service throughout the corridor. The MBTA developed an extensive public participation process in order to create community consensus on questions of housing and economic development along the corridor. In addition, the MBTA examined bus routes throughout the Southwest Corridor and recommended service changes both to better meet the needs of the passengers and to serve the new Orange Line. Both processes are nearly complete. Now we need to turn our attention to the Washington Street corridor and address the issues associated with Orange Line demolition, Washington Street reconstruction, and replacement service.

As soon as the new Orange Line is in service the state will begin to tear down the existing structure along Washington Street from Forest Hills to Chinatown. The original station structure at Dudley will be incorporated into the replacement service terminal because of its historic interest. After demolition, the state will reconstruct Washington Street in two phases. The work from Dudley north to Chinatown will be incorporated into the replacement service project. The work from Dudley south to Forest Hills will proceed as soon as the Orange Line is demolished in that section.





**STUDY AREA**



Although the state has made a commitment to providing replacement service from Dudley to downtown, no consensus has emerged on the type of service. The MBTA's study of replacement service alternatives, which began in 1977 with a feasibility study, is still under way. The MBTA plans to ~~issue~~ submit a draft Environmental Impact Study (EIS) to the ~~Urban Mass Transportation Administration~~ on November 1, 1986. After a 45-day comment period, which will include a public hearing, the MBTA will prepare a final EIS and a recommendation for a preferred alternative by March 1, 1987.

After the final EIS, the MBTA will prepare a grant application to the Urban Mass Transportation Administration (UMTA) seeking approval to draw down the interstate transfer funds for this project. Because the funds have already been earmarked for this area, the MBTA does not anticipate any problems in receiving UMTA approval. The application would be filed in the spring or summer of 1987; approval should come that fall. Upon approval the MBTA could issue a design contract in September 1987. Under that schedule, bus service could begin in 1988 and LRV service in 1990. *see figure x*

## 2.2 Replacement Service Alternatives

The MBTA is currently evaluating two replacement service alternatives: light-rail vehicles (LRVs) and buses. The option of trackless trolleys is no longer under consideration.

### 2.2.1 Light-Rail Vehicles

LRVs provide better transportation service than buses--but at a price. LRVs would serve more people, get them downtown faster, and provide a free transfer to other rapid-transit lines in the MBTA system. The MBTA estimates that about 9000 riders a day will use the LRV in the year 2000. The average trip time from Dudley to downtown Boston would take about 12 minutes.

The price of this service is higher construction costs (\$40-50 million), greater construction disruption, and possibly several property takings in Dudley and Chinatown. However, despite the high initial capital costs, low operating costs bring the cost per rider to \$1.80-2.21 (net operating cost plus amortized capital cost).

Because it represents a major capital investment, LRV service can stimulate economic development more effectively than bus service, an important consideration for Roxbury residents. In addition, providing LRV service from Dudley to downtown opens the possibility of extending the line south to Mattapan through the Franklin Park and Grove Hall neighborhoods.



TYPE OF REPLACEMENT SERVICE	LIGHT RAIL	
	RADIAL ROUTE(S)	WASHINGTON STREET
		Washington Street
DOWNTOWN ROUTE(S)	DIAGONAL BRIDGE & TUNNEL	
		WASHINGTON STREET BRIDGE AND SURFACE
Transportation Service		Best
Downtown Distribution		Yes
Free Transfer to Other Rail Lines		Yes
Avoids Downtown Traffic Congestion		Yes
Limits Street Capacity		Yes
Limits Cross-Street Circulation		Yes
Trip Time* Dudley to Downtown (minutes)		11.7
Daily Trips - Year 2000 (1)		9,250
Environmental Impact		
Noise	Intermediate	Intermediate
Pollutant Emissions Along Rt.	None	
Construction Disruption		
Property Takings (Land or Building)	Most	Same
Cost (1984 \$)		
Capital Cost (3) [1 Million]	49.2	38.5
Annual Operating Cost [1 Million]	.84	.84
Net Operating Cost per Trip [dollars]	.30	.30
Equivalent Cost per Trip [dollars]	2.21	1.80



RADIAL ROUTE(S)

Washington  
Street

Tremont & Albany  
Streets

DOWNTOWN ROUTE(S)

South  
Cove  
Loop

Downtown  
Loop

Boston  
Common  
Loop

Boston Common &  
South Station  
Loops

Boston Common  
South Cove  
Loops

Transportation Service

Downtown Distribution  
Free Transfer to Other Rail  
Lines

Avoids Downtown Traffic  
Congestion

Limits Street Capacity

Limits Cross-Street Circu-  
lation

Trip Time: Dudley to Down-  
town (minutes)

Daily Trips - Year 2000 (1)

Poor

No

Yes

Yes

No

Good

No

No

No

No

Fair

No

No

No

No

Fair

No

No

No

No

Fair/Poor

No

Partially

No

No

20.0

3,010

22.6

2,830

22.6

4,550

18.0

4,950

20.0

2,270 (2)

Environmental Impact

Noise

Pollutant Emissions Along Rt.

Construction Disruption

Property Takings (Land or  
Building)

Most  
Some  
Least

Some, if Street widened in Dudley Square

Cost (1984 \$)

Capital Cost (3) (\$ Million)

Annual Operating Cost

(\$ Million)

Net Operating Cost per Trip

(dollars)

Equivalent Cost per Trip

(dollars)

13.0

.39

.57

2.58

14.0

.69

.46

1.55

13.8

.70

.51

1.67

14.3

1.23

1.45

3.40

13.9

1.05

1.16

2.93



### 2.2.2 Buses

Buses, while not as disruptive as LRVs, are slower and would serve fewer people. The trip from Dudley to downtown would take 18-20 minutes, passengers would not have a free transfer to the subway, and buses would have to compete with heavy downtown traffic. As a result, daily ridership estimates for the bus alternatives are substantially lower than those for the LRV option, ranging from 2300 to 5000 according to the route. Initial capital costs would be about \$14 million; the cost per trip varies from \$1.55 to \$3.40.

In addition, the localized nature of bus service would not support economic development along the corridor as effectively as fixed-route LRV service.

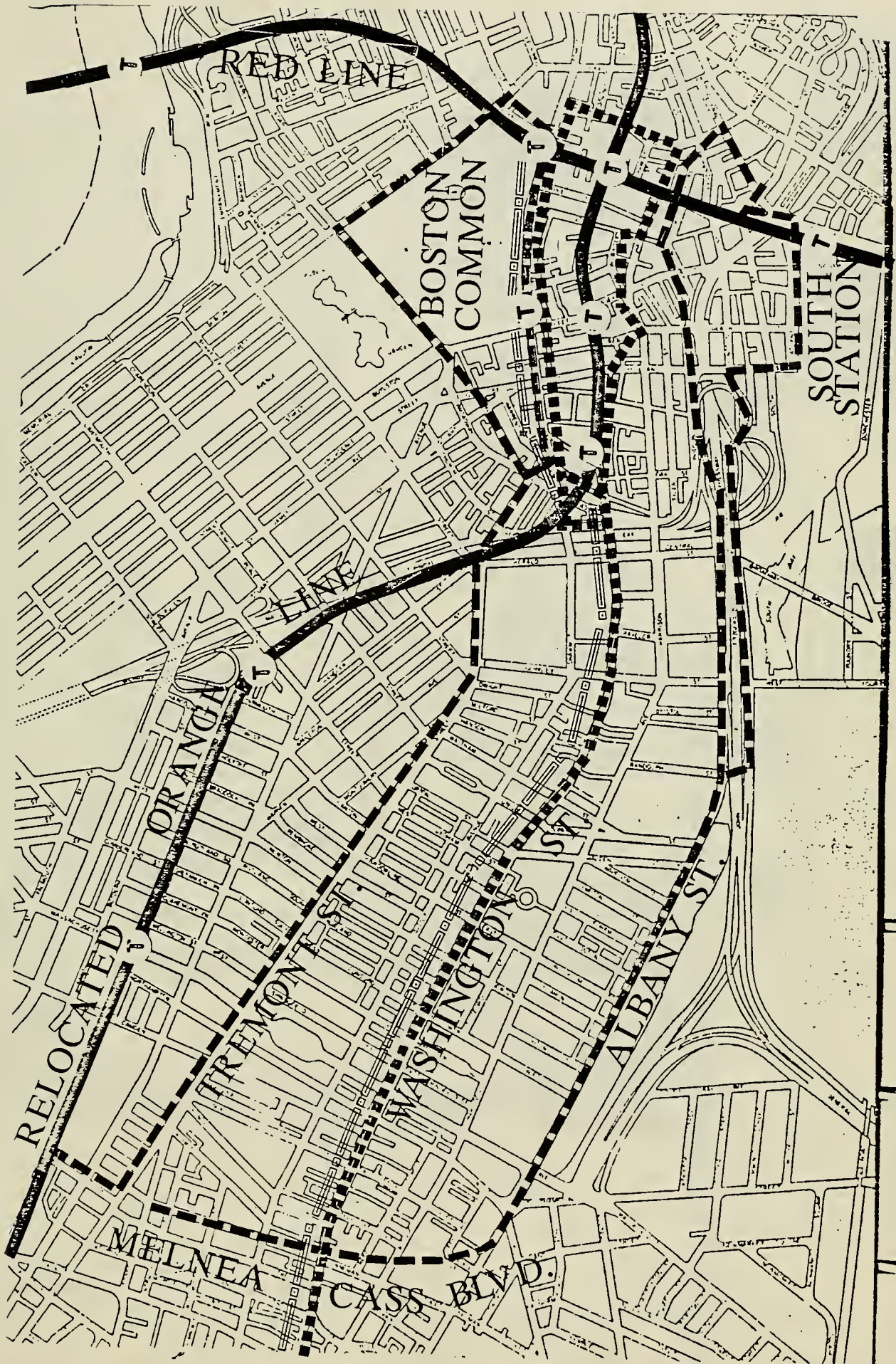
### 2.3 Routes

LRV service would run along Washington Street and enter the Boylston Street Green Line Station through an abandoned tunnel on Tremont Street. Because of community concerns about the location and safety of a tunnel portal, the MBTA has proposed three LRV configurations in Chinatown (see map):

- o Tremont Street Tunnel Option. Run along Marginal Road past Shawmut and enter tunnel shortly before turning onto Tremont Street, run under Elliot Norton Park and into station
- o Shawmut Avenue Surface Option. Run across Marginal Road to Shawmut Avenue and Tremont Street and enter tunnel on Tremont near Eliot Norton Park
- o Washington Street Surface Option. Run along Washington Street past the Quincy School and enter the tunnel at Common Street just north of the Don Bosco School.

The MBTA has proposed five bus route alternatives (see map). Three run along Washington Street but distribute people downtown differently: in the South Cove area, around the Boston Common, or in the Downtown Crossing area. Two other bus route proposals run buses inbound along Tremont Street and outbound on Albany Street; downtown distribution would be in the South Cove or South Station areas.







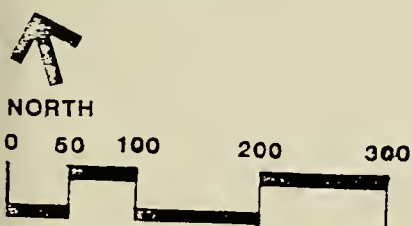




# Chinatown Light Rail Options

## LEGEND

-  SURFACE OPTION
-  TUNNEL OPTION
-  DIAGONAL BRIDGE OPTION
-  WASHINGTON ST. SURFACE OPTION





The MBTA is also evaluating two options for crossing the Massachusetts Turnpike, either along the existing Washington Street bridge or by constructing a new "diagonal bridge" from Washington and Herald to Marginal and Shawmut. The new bridge would have operational advantages because it eliminates a difficult turn at Washington and Marginal. But again, improved operations come at a higher cost. The diagonal bridge, in conjunction with the tunnel under Elliot Norton Park, adds about \$10 million in construction costs to the LRV option.

#### 2.4 Cost Implications

Joint state and federal funding will cover the capital costs of replacement service and road reconstruction between Dudley and Chinatown. About \$30 million is available in federal interstate transfer funds; these funds can cover 80 percent of the costs. The state will pick up the remaining 20 percent, most likely by issuing bonds. Since only \$30 million is available in federal funds, the state would have to pay for all costs exceeding \$30 million.

#### 2.5 Traffic and Parking

The bus alternatives with downtown distribution loops will have problems operating efficiently. The Downtown Crossing loop, which serves the most people, travels on the most congested streets. The Boston Common and South Cove loops encounter less traffic. But because of their circuitry and distance from the business district, they serve fewer people.

All bus alternatives call for reconstructing Washington Street in Dudley Square with options to maintain or widen the roadway. Widening Washington Street--most likely in conjunction with major development in the area--would not affect traffic circulation or parking. However, bus options without widening Washington Street would displace seven parking spaces near the Eliot Cemetery.

The LRV alternatives affect traffic and parking in Dudley Square, the Cathedral District, at the Turpike crossings, and in Chinatown. In all cases, the LRV reservation would restrict left turns onto certain streets. However, these restrictions will have no adverse effects on overall traffic circulation. Local impacts include the following.



- o In Dudley Square, widening the roadway north of the intersection of Eustis and Williams Streets to accommodate the LRV reservation would displace 12 on-street parking spaces.
- o In the South End, another 34 spaces would be lost permanently at Monsignor Reynolds Way, Massachusetts Avenue, and Melnea Cass Boulevard in order to provide left-turn lanes on Washington Street.
- o The Cathedral District, from East Berkeley Street to Monsignor Reynolds Way, poses the major challenge in the South End. If land is not taken to widen Washington Street in this section, 28 spaces would have peak-hour parking prohibitions.
- o The Washington Street surface option would require a peak-hour parking prohibition for 40 spaces on Washington Street between Common Street and Marginal Road. An additional seven spaces would be lost permanently between Common Street and the entrance to the Tufts Garage. The alternative of widening the road would encroach upon development plans for Parcels R-3.
- o The Tremont Street tunnel would displace 39 lightly used metered spaces on Marginal Road between Tremont and Washington Streets. The tunnel portal reduces the capacity of Marginal Road at Tremont Street, but the intersection would still work at an acceptable level of service.
- o The Shawmut Avenue surface option would require the loss of 11 metered spaces on Tremont Street, eight on Shawmut Avenue, and 13 on Marginal Road for a total of 32.

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## 2.6 Recommendations

The LRV option represents the best long-term transit choice for the City of Boston. Our support of this option will help revitalize the Washington Street corridor, and Dudley Square in particular, while providing first-class service to a low-income transit-dependent population.

These benefits are not without costs. Chinatown residents are justifiably concerned about the physical impacts of LRV service running through their community. And the Tremont Street option, which minimizes these impacts by putting the LRV in a tunnel at the fringes of the community, encroaches upon the housing planned for the BRA's Parcel R-7. In addition, the LRV may require some property takings and/or parking prohibitions at particularly narrow sections of Washington Street in Dudley Square and the Cathedral District.

The question of the LRV alignment in Chinatown is complicated. Each option has advantages and disadvantages, and the choice requires trade-offs between public transportation efficiency, parking resources, vehicular travel, costs, and neighborhood impacts. But the advantages of LRVs are so great and so far-reaching that this option deserves our support. Provided that its localized impacts can be minimized, the LRV alternative best meets the overall goals of this Administration.

Accordingly, the City needs to ensure that the State recognizes its responsibility to mitigate the impacts of replacement service in the following areas (discussed in detail in Section 3): (1) demolition management, (2) Washington Street reconstruction, (3) off-street parking, (4) housing, and (5) economic development.

Replacement service represents the opportunity to build a first-class transit line within the City of Boston. By influencing the MBTA to support LRVs and by working with the state on the issues identified above, we can ensure maximum benefits for this long-neglected area of the city.



# **Policy Issues**



### 3.0 POLICY ISSUES ALONG THE WASHINGTON STREET CORRIDOR

The demolition of the Orange Line elevated structure, the new Orange Line, and replacement service on Washington Street will all have profound impacts on commuting patterns, housing, and economic development along Washington Street from Chinatown to Forest Hills. Consequently, this project represents an enormous opportunity for the City to make a visible commitment to meeting a number of the goals of this administration. These include

- o improved transportation access
- o housing creation
- o economic development
- o anti-displacement measures for housing and commercial enterprises
- o employment opportunities for Boston residents
- o neighborhood access to decision-making
- o improved quality of life for City residents.

To help meet these goals the City needs to develop programs and seek state action and funding in the following areas: (1) demolition management, (2) Washington Street reconstruction, (3) off-street parking, (4) housing programs, and (5) economic development.

#### 3.1 Demolition Management

Demolition of the elevated Orange Line structure, scheduled to begin in Spring 1987, will take about nine months. Besides generating dust, dirt, noise, and vibrations, demolition will disrupt pedestrian and vehicle circulation along this densely developed corridor. Although the MBTA will manage this process, the City has a great interest in seeing that the work proceeds smoothly and in a timely manner. Unless the state plans and manages the demolition contract thoughtfully, the work could disrupt local and through traffic, degrade the residential environment, and interrupt retail business and general commerce.

##### 3.1.1 Recommended State Actions

The state should be required to consult with residents, business owners, and the City in preparing a timetable, management plan, and performance specifications for the demolition contract. These specifications must include the following:



- o Place an MBTA official in the field to monitor contract compliance and to act on citizen complaints.
- o Identify detours clearly and provide traffic control officers to manage vehicular and pedestrian traffic.
- o Ensure safe conditions for pedestrians in the affected areas.
- o Provide access at all times for businesses, residents, and emergency vehicles.
- o Minimize the temporary loss of parking spaces.
- o Provide adequate public notice of demolition schedule and extent of work.
- o Control noise, vibration, and dust.
- o Provide financial assistance to the Mayor's Office of Neighborhood Service to underwrite the cost of dealing with citizen complaints about demolition activities.

### 3.2 Washington Street Reconstruction

After the Orange Line demolition, the State will reconstruct Washington Street from Forest Hills to Chinatown. Reconstruction will proceed in two phases. The MBTA has agreed to fund road work between Dudley Square and Forest Hills, while replacement service funding will cover the work between Dudley Square and Chinatown regardless of the option chosen.

A reconstructed Washington Street will benefit the entire corridor. Not only will a new roadway enable automobiles and public transportation to move more efficiently, but at the same time it can support community development goals throughout the corridor.

Of particular concern is the Washington Street Bridge, which runs one-way northbound over the Massachusetts Turnpike. Thus, southbound traffic leaving downtown Boston must cross the Turnpike along Tremont Street and pick up Washington Street farther south. Redesigning the bridge to make Washington Street two-way from Kneeland Street to Forest Hills would ease southbound traffic congestion by providing an additional exit route from downtown Boston.



To work most efficiently with a two-way bridge, Herald Street should carry two-way traffic and Marginal Road should continue to run one-way westbound. Currently Herald Street is two-way from Washington to the Southeast Expressway and one-way from Tremont to Washington Streets.

### 3.2.2 Recommended State Actions

The State should take the following steps, through written agreements as appropriate, to ensure that the new Washington Street meets our goals for efficient transportation and community development.

- o Enter a written contract with the City that establishes a role for the City, neighborhood residents, and area businesses in planning the street design and a construction management plan.
- o Use urban design standards for street reconstruction (i.e., lighting, landscaping, sidewalk materials, street furniture, and the like) to reinforce city revitalization policies for each subarea while creating a consistent boulevard along the full length of Washington Street.
- o Carry street and sidewalk improvements an appropriate distance into intersecting streets to blend the improvements with existing conditions on the side streets.
- o Undertake appropriate measures (comparable to those identified in Section 2.1.1 for demolition management) to mitigate the impacts of street reconstruction.
- o Formalize an agreement with the MBTA on allocation of \$10 million for capital improvements on Washington Street between Forest Hills and Dudley Square and start reconstruction as soon as the elevated structure is removed.
- o Redesign and reconstruct the Washington Street Bridge to carry two-way traffic and redesign Herald Street to carry two-way traffic from Tremont Street to the Southeast Expressway.



### 3.3 Parking

Providing adequate parking along Washington Street, especially in the commercial districts and at MBTA stations, will play an essential role both in revitalizing the corridor and mitigating the short-range impacts of construction.

Parking needs to serve three distinct groups: (1) shoppers and other short-term patrons of the commercial districts along Washington Street, (2) city resident commuters, typically long-term parkers who will drive to the relocated Orange Line and, possibly, to Washington Street replacement service, and (3) residents of the neighborhoods in the Washington Street corridor.

#### 3.3.1 Commercial parking

Inadequate public parking is, and will continue to be, a serious problem to the merchants along Washington Street, especially Forest Hills, Egleston Square, Jackson Square, Dudley Square, the South End, and Chinatown.

Dudley Square will be particularly hard hit by the impacts of MBTA actions. Lack of adequate parking in Dudley Square has already caused extensive illegal parking. When the MBTA relocates the Orange Line and reroutes a number of bus routes currently terminating in Dudley Square to Ruggles Station, Dudley businesses will depend even more heavily on automobile traffic, at least until replacement service begins. Establishing off-street parking at the former Blair's Market will serve some of these immediate needs. But providing additional attractive, well-lit, and secure parking areas will help retain business confidence in this area during the transition and in the long run.

As the major commercial district along Washington Street between Dudley Square and Forest Hills, Egleston Square stands to be severely hurt by the Orange Line relocation. Neither the relocated Orange Line nor the proposed replacement service will run through the district. As a result, Egleston Square will depend almost entirely upon automobile and pedestrian traffic. While removing the Orange Line will make available some on-street spaces currently used by park-and-ride commuters, this area has limited parking. Developing several near-by parcels for shopper and commuter parking could link Egleston Square with the new Orange Line station at Jackson Square to create a major commercial district along this stretch of Columbus Avenue.



### 3.3.2 Commuter parking

The new Orange Line will attract riders from the southwestern part of the city. Many will undoubtedly drive to the station, park all day, and commute to downtown jobs. As the southern terminus of the new Orange Line, Forest Hills will face the greatest demands for commuter parking. The MBTA has scaled back its original plans for a 1000-space garage on the site due to community opposition. Present plans, which call for 150-200 new spaces, will likely prove inadequate.

Reducing the size of a parking facility does not necessarily discourage traffic. Instead, it encourages commuters to cruise along residential streets in search of all-day parking or, alternatively, to drive to work and compete for even scarcer parking spaces downtown. But a park-and-ride facility will promote use of rapid transit while leaving on-street parking spaces available for residents and shoppers. Providing off-street parking for commuters from other neighborhoods in the city--particularly in combination with a resident parking program--can help divert them from local streets.

### 3.3.3 Residential parking

Residents of the neighborhoods along the Washington Street corridor will find themselves competing with commuters and shoppers for parking spaces in their own neighborhoods. Providing adequate parking for these groups will leave on-street spaces available on residential streets for residents. Resident parking programs can help those areas affected by commuter parking. But the program by itself will not solve the parking problem that shoppers and commuters face. Unless these groups have alternative parking available, a resident parking program may discourage transit users and store patrons by shifting their cars elsewhere.

### 3.3.4 Recommended City Actions

The Real Property department has recently undertaken a study of citywide parking needs. In addition, the Transportation Department is evaluating parking strategies in the downtown core and park-and-ride opportunities outside Boston Proper. Besides pursuing the recommendations from these studies, the city should take the following actions regarding parking in this corridor.



- o Work with the MBTA and the community to reopen discussions about a park-and-ride facility in Forest Hills.
- o Expand existing efforts to enforce traffic and parking regulations.
- o Expand the resident parking program if necessary in neighborhoods facing competition from commuters and shoppers.

### 3.3.5 Recommended State Actions

The State has funding available for off-street parking programs which can be used to support City objectives in this area, including the following.

- o Allocate a portion of its off-street parking funds to pay for lots at major commercial districts and MBTA stations along Washington Street and Columbus Avenue, including Dudley, Egleston, and Jackson Squares.
- o Cooperate with City efforts to provide commuter parking at Forest Hills Station.

### 3.4 Housing

The blighting influence of the elevated Orange Line has spared much of the Washington Street corridor from the speculative pressures that have raised prices in the rest of the South End and other neighborhoods. But given the escalation in corridor housing prices in anticipation of demolition, the City must take steps soon to ensure that a significant portion of the housing in the area remains affordable both to long-term residents and to other low- and moderate-income households. The most effective way to accomplish this goal will be to include affordability requirements on all developments in the area and target State subsidies for this corridor.

The City owns a number of parcels along the corridor in Dudley, Chinatown, and the South End. By targeting these parcels for low- and moderate-income housing, gardens, and open space, we can stabilize the area and protect it from speculative pressures.

The BRA has already begun the process with the South End Neighborhood Housing Initiative (SENHI), a property-disposition program (see Section 4.3.). Continuing to impose affordability requirements on all municipally aided developments in the area will enable the City to maintain a decent quality of life for residents throughout the corridor.



### 3.4.1 Recommended State Actions

The state also owns a number of parcels along the corridor that could be targeted for housing such as the Bartlett MBTA yard at Dudley. The state should cooperate with city efforts to provide affordable housing along this corridor in the following ways.

- o Commit state housing subsidy resources to city-owned parcels in the corridor to ensure affordability on new construction or rehabilitation projects.
- o Contribute to an anti-displacement fund to allow current residents to stay in their units.
- o Develop and fund a low-interest loan program for private rehabilitation of affordable units.
- o Make state-owned sites available for housing, such as the Bartlett MBTA yard.

### 3.5 Economic Development

The removal of the Orange Line will have a substantial impact on the commercial establishments along Washington Street. Over time, a revitalized corridor will enhance economic development opportunities. And as more housing becomes available -- particularly with ground-floor commercial space -- more customers are likely to patronize local stores.

However, the short-term disruption may threaten the survival of a number of existing business enterprises. Negative impacts fall into two categories: (1) increased reliance on the automobile and (2) economic displacement.

#### 3.5.1 Automobiles

Pedestrian traffic will decline along the corridor, particularly in the vicinity of the present Orange Line stops. Washington Street bus replacement service and the LRV option will still enable customers to use mass transit to reach local businesses. However, even the highest replacement service ridership estimates are lower than existing Orange Line ridership. ~~But~~ But the option that places bus routes on other South End streets will divert transit-dependent customers and leave Washington Street merchants completely dependent upon walk-in and automobile traffic.



With increased dependence upon the automobile, the availability of adequate on- and off-street parking becomes even more critical to the success of businesses in the corridor. This is particularly important in connection with the replacement service options that reduce the availability of on-street parking. In particular, LRV service may require an on-street parking prohibition, at least during peak commuting hours, in the Cathedral District because of the narrow road width.

### 3.5.2 Displacement

Replacement service options will require several direct business relocations, especially in Dudley Square and Cathedral. But as the Washington Street corridor becomes more attractive, indirect economic displacement may threaten existing businesses. Once the elevated Orange Line structure is removed, opportunities for new, more lucrative business will occur. Long-standing business enterprises will have to be able to invest to compete and to increase their revenues to match rising rents.

### 3.5.3 Recommended State Actions

Concentrated assistance is necessary to prevent severe negative consequences for local merchants and to enable area commercial districts to continue to provide services to neighborhoods along the corridor. The city is developing a comprehensive small-business assistance package designed both to assist merchants during demolition and to prepare them for the post-demolition era of higher rents and greater competition. A key component of this package will be state funding, presently slated to come from the MBTA. In addition, the state owns several parcels in the Dudley Square area that would be suitable for new or relocated businesses. State-funded support activities should include the following:

- o Provide attractive, well-lit parking areas along the corridor, particularly in the commercial centers.
- o Allocate a major share of \$7.5 million in state commercial stabilization funds to the businesses along Washington Street to enable them to weather the disruption of the demolition and to upgrade in response to more competitive situations.
- o Target state business loan and technical assistance programs to Washington Street businesses.



- o Expand the Roxbury Heritage Park project to complement business development in Dudley Square through facade improvement, sidewalk and lighting improvements, and pedestrian arcades.
- o Transfer state-owned parcels suitable to business development to the city, including Dudley terminal and sites at the intersection of Washington Street and Melnea Cass Boulevard.

**DRAFT**



# **Neighborhood Impacts**



#### 4.0 NEIGHBORHOOD-SPECIFIC IMPACTS

Replacement service will pass through Roxbury, the South End, Chinatown, and possibly parts of downtown Boston. Residents of each neighborhood, and sometimes of each block along the route, have a different set of concerns about service alternatives. Simply put: Roxbury residents generally prefer the LRV, the Chinese community wants buses, and the South End is divided on the issue. Section 3 identified corridor-wide issues associated with replacement service, Orange Line demolition, and Washington Street reconstruction. Briefly noted below are the main location-specific land-use and development impacts of replacement service from Chinatown to Forest Hills.

##### 4.1 Chinatown/South Cove

Chinatown residents can walk to many downtown locations, and they have reasonably convenient access to MBTA rapid transit service. The only additional MBTA services that will meet specific community needs are better connections to the manufacturing jobs at Boston Marine Industrial Park in South Boston. In addition the loss of residential property due to construction of the Surface Artery, Southeast Expressway, and Massachusetts Turnpike has made residents extremely sensitive to physical barriers within the community and the loss of housing development sites. Consequently, their interest in replacement service focuses more on community impacts than on transportation efficiency.

Because each LRV alternative will have physical impacts without meeting any service needs, Chinatown residents prefer the bus alternative. Many perceive LRVs as a physical barrier dividing their community in half, and they view streetcars and the tunnel portal as safety hazards. Moreover, the LRV option would interfere with plans to develop several sites targeted for housing, either by requiring land-takings or by reducing access to a site. However, community representatives have indicated that if neighborhoods farther from downtown prefer LRVs, then this option would be somewhat acceptable provided the streetcars entered a tunnel before reaching Chinatown.

##### 4.1.1 LRV Alignments

The MBTA responded to specific concerns about safety and physical barriers by developing three alternatives for linking a Washington Street LRV to the tunnel under Tremont Street. Issues surrounding these specific options follow.



#### 4.1.1.1 Tremont Street Tunnel Option

This option is the least objectionable to community residents because it avoids physical barriers.

- o At approximately \$50 million, this is the most expensive choice.
- o Construction would take approximately 2-3 years and require extensive utility relocation.
- o Since the tunnel would run under Elliot Norton Park, the MBTA would make improvements to the park as part of this alternative package. However, the park would be unavailable for use during the construction period.
- o The tunnel clearance at Church of All Nations appears to be insufficient. It encroaches upon BRA Parcel R-7 along the entire Tremont Street frontage and may damage structural supports for the housing scheduled to begin this year.

#### 4.1.1.2 Washington Street Surface Option

Developed at the request of the community, this option would create a physical barrier to Chinatown/South Cove circulation and take parcels slated for housing development.

- o Reconstructing Washington Street to allow two-way traffic would require taking a significant portion of BRA-owned Parcel R-3, the major remaining residential development parcel in Chinatown.
- o This option would also interfere with housing development on a parcel owned jointly by the BRA and Don Bosco High School.
- o This option eliminates the need for the diagonal bridge, which may expedite turnpike air rights development.
- o The tunnel portal, on a discontinued section of Common Street, does not conflict with vehicular or pedestrian traffic.



#### 4.1.1.3 Shawmut Avenue Surface Option

This option creates a number of physical barriers.

- o This option would impede access to Mass Pike Towers and the Quincy School complex.
- o The LRV will surface in front of Bradford Towers at the edge of Elliot Norton Park, presenting a barrier across Tremont Street.

#### 4.1.2 Recommended State Actions

To mitigate the impacts of an LRV option on this community the state should undertake the following actions:

- o Minimize construction impacts on the community.
- o For the Washington Street option, reinforce the Common Street tunnel portal to allow housing construction over it.
- o To compensate for the loss of Parcel R-3 associated with the Washington Street option, state housing subsidy must be supplied to make the balance of the site affordable.
- o For the Tremont Street option, address the impacts of tunnel encroachment upon Parcel R-7.
- o Provide better transit access between this community and the manufacturing jobs at Boston Marine Industrial Park.

#### 4.2 Massachusetts Turnpike Crossings

The MBTA has proposed two alternative LRV crossings over the Massachusetts Turnpike: (1) run tracks along the Washington Street bridge, and (2) construct a new diagonal bridge.

The diagonal bridge, proposed in connection with the Tremont Street and Shawmut Avenue options, has operational advantages by eliminating a difficult turn at Marginal Road. The bridge, however, poses serious consequences to the future turnpike air-rights development of the parcel bounded by Shawmut Avenue, Marginal Road, Washington Street, and Herald Street. In particular, it inhibits opportunities for ground-floor uses and may lessen the marketability of the parcel as either a commercial or mixed-use residential parcel.

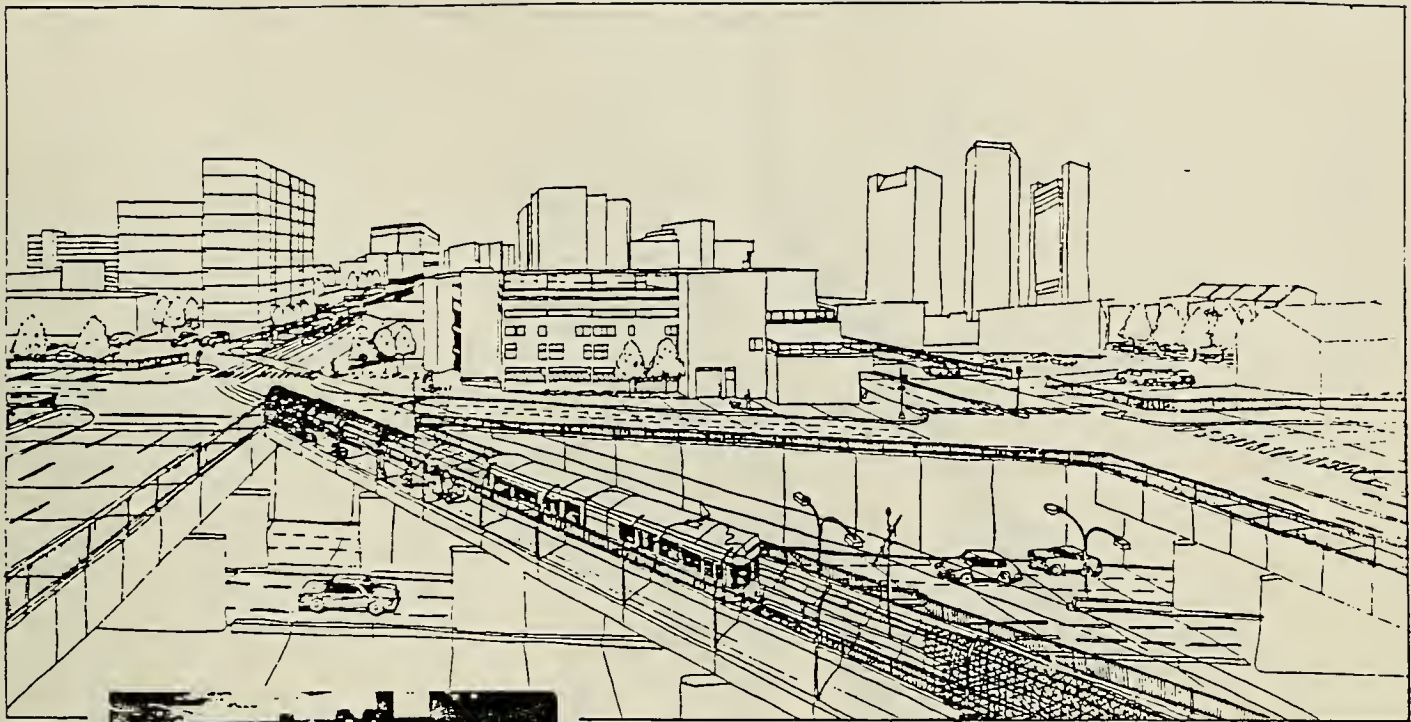


# LRV CONFIGURATIONS IN CHINATOWN

	Tremont	Washington	Shawmut
Parking displaced	39	7	32
Peak parking lost	0	40	0
Land takings	No	Yes	No
Encroachment	Parcel R-7	Parcel R3/R3A	No
Construction Disruption	Most	Least	Least
Diagonal Bridge	Yes	No	Maybe

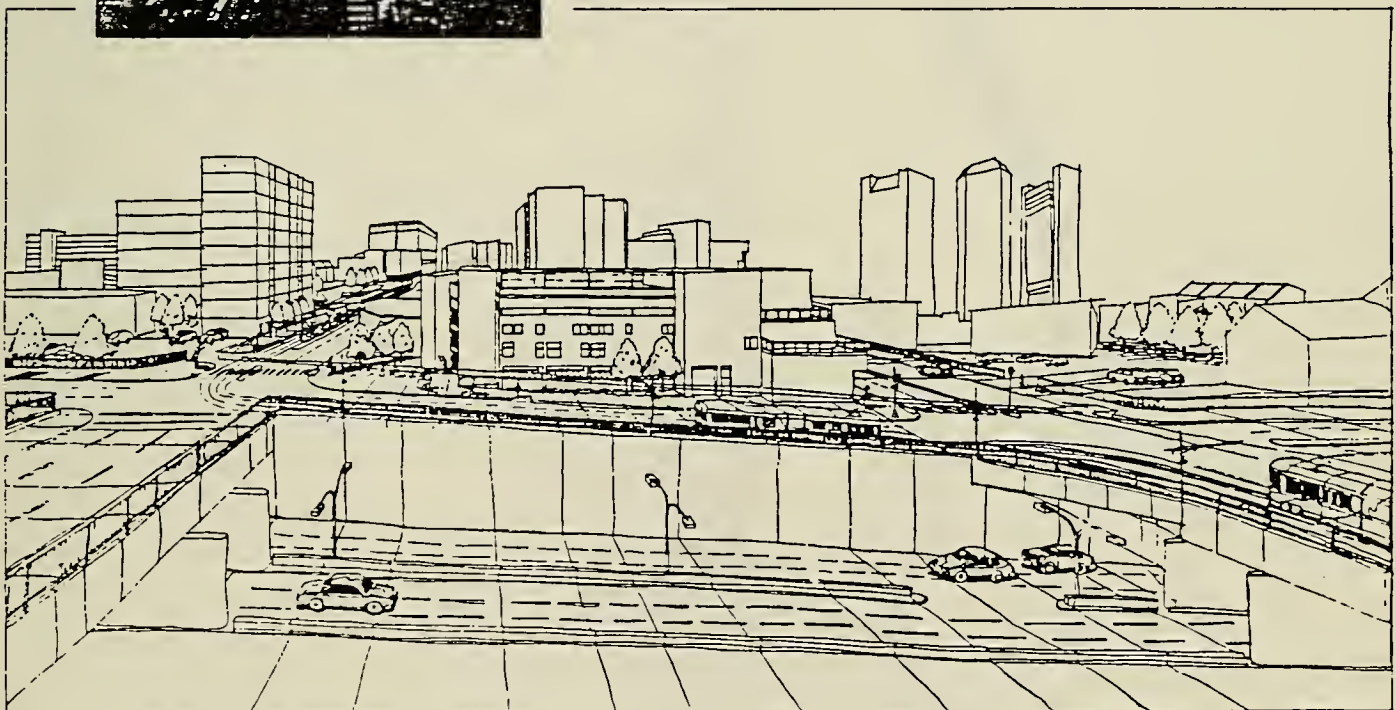
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## DIAGONAL BRIDGE OPTION

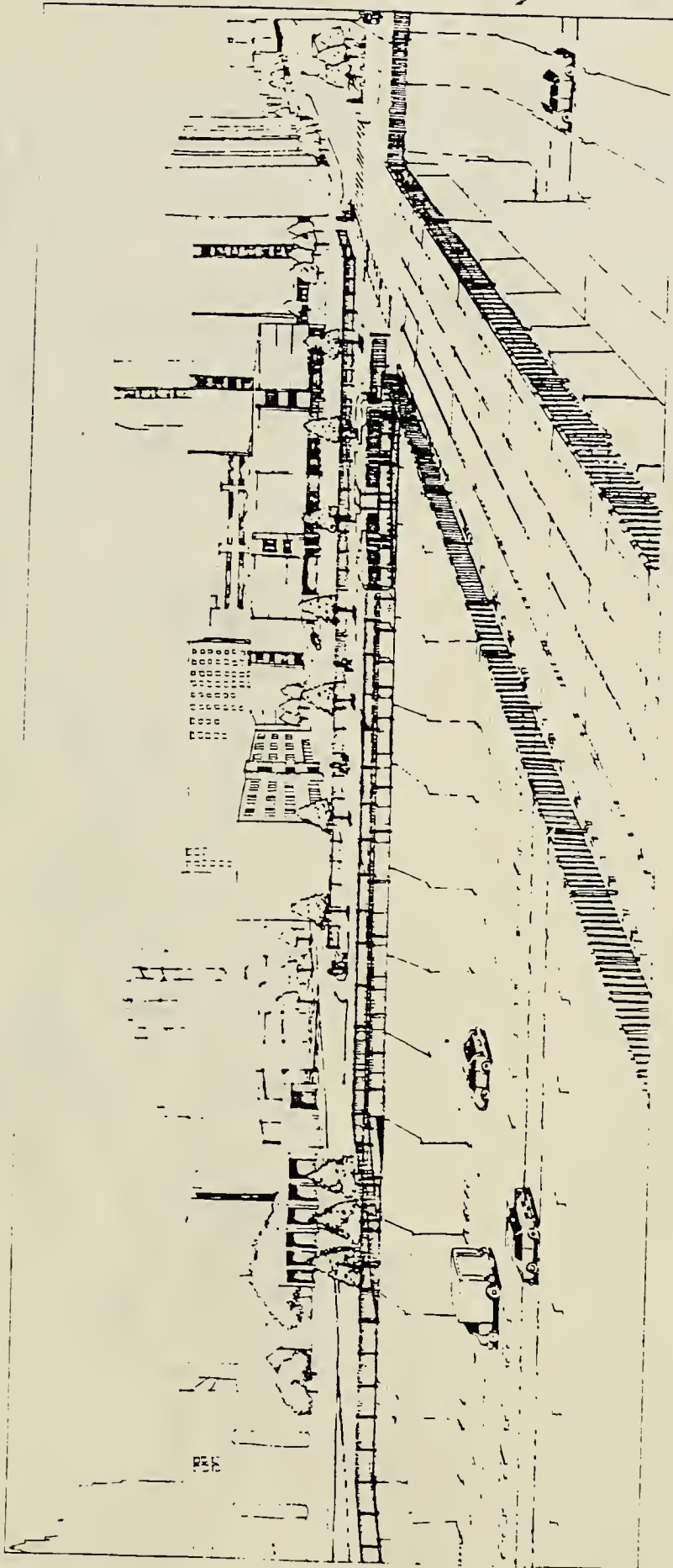
Above is a view of a diagonal bridge across the Massachusetts Turnpike that could be built for light rail.



## WASHINGTON STREET BRIDGE OPTION

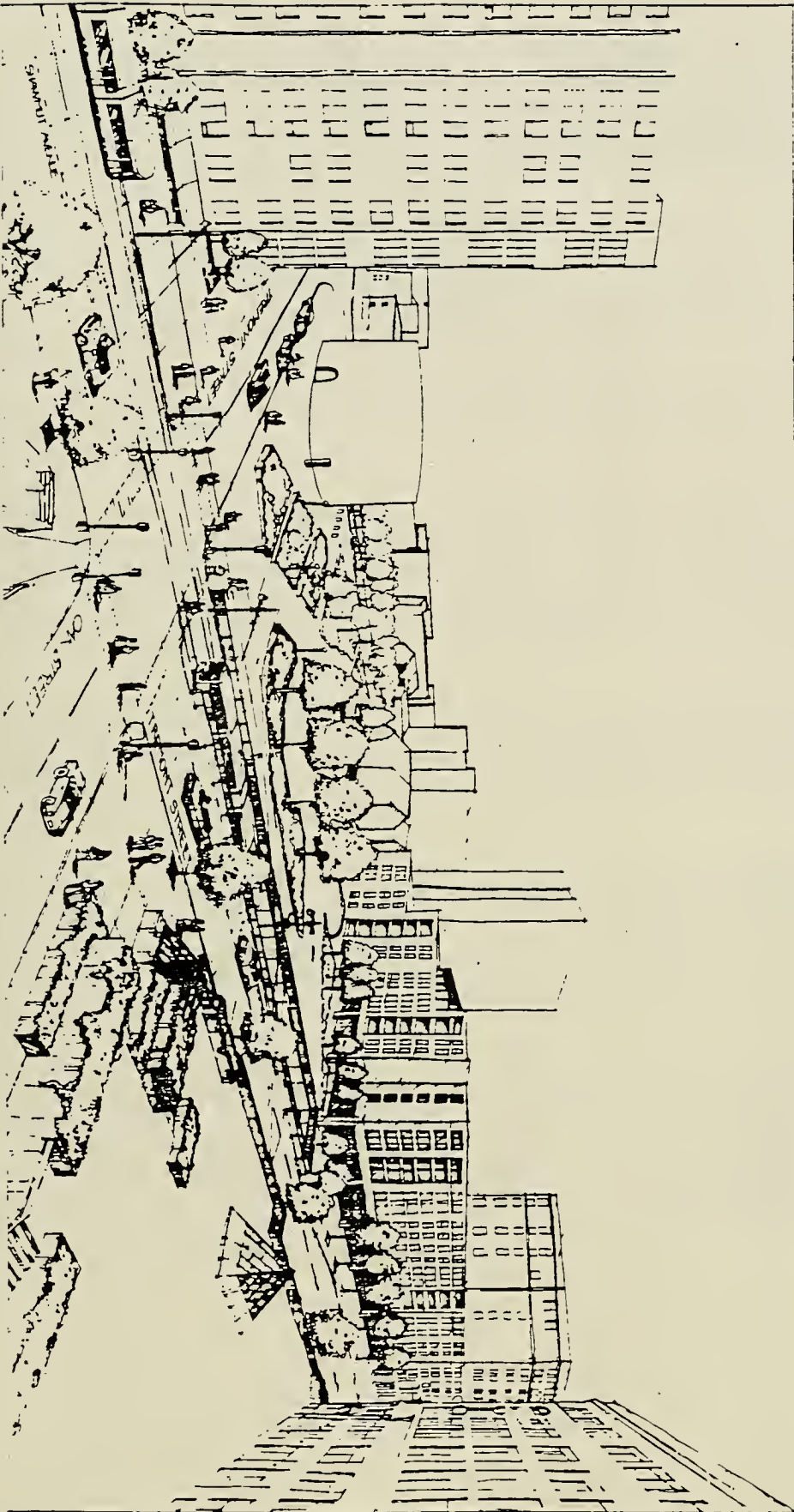
Crossing the Massachusetts Turnpike on the Washington Street Bridge, as shown in the option above, the light rail would continue into the South End.





TUNNEL OPTION







The Washington Street option similarly poses future development restrictions and may cause negative impacts on the turnpike air-rights parcel. In addition, running tracks along a two-way Washington Street Bridge may interfere with optimal traffic flow. This option is significantly less expensive, however.

#### 4.2.1 Recommended State Actions

- o Develop engineering plans that minimize the negative impacts of LRVs on air-rights development, specifically noise and vibrations.
- o Facilitate air-rights development over the turnpike by incorporating LRV tracks in any plans.

#### 4.3 South End

Removal of the elevated Orange Line will cause property values to rise along this stretch of Washington Street, creating housing and commercial displacement. At the same time, the loss of a major transit line will make the commercial districts in the area depend heavily upon automobile and pedestrian traffic, especially in the short run.

While buses will create no direct physical impacts, the localized nature of their service will tend to diminish Washington Street's importance. The Albany/Tremont bus option--by diverting ridership from Washington Street--will have an especially detrimental effect.

The LRV alternative will have a major physical impact on two sections of Washington Street. Most of the roadway can carry two lanes of moving traffic in each direction, a parking lane on each side, and LRV tracks with a landscaped median. But two sections of the road are significantly narrower: the Cathedral district and the section between Berkeley and Herald Street.

LRV service in the vicinity of the Holy Cross Cathedral would require widening the roadway or prohibiting peak-hour parking. Either option would affect seven heavily patronized businesses with housing above the first floor. If the buildings are taken in order to widen the roadway, businesses and residents must be relocated in the immediate vicinity of the Cathedral. If parking is removed instead, off-street replacement spaces should be provided near-by.



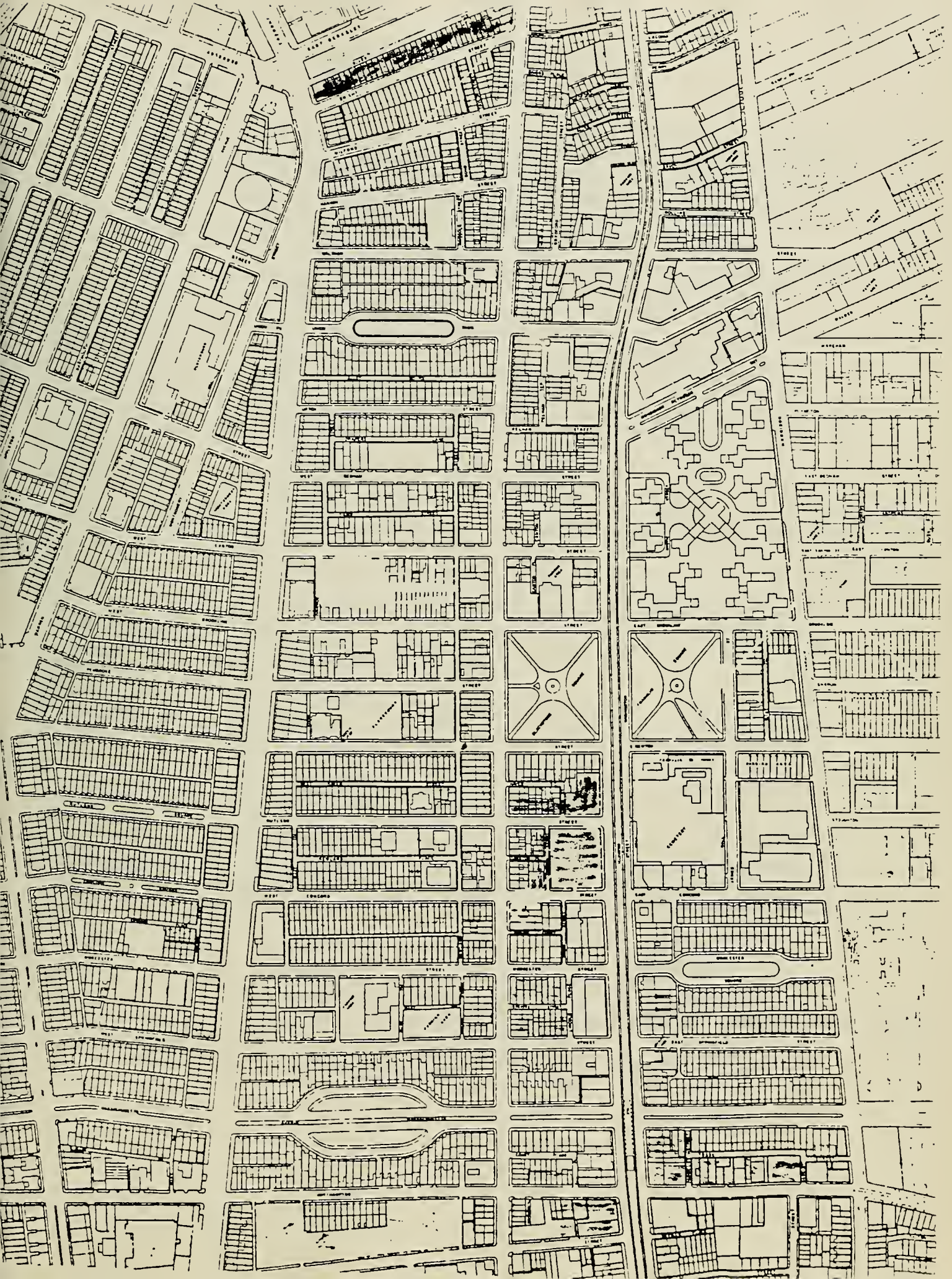
# SENHI Parcels for Disposition

<u>Parcel</u>	<u>Address</u>	<u>Land Area</u>
30 and RD60	1565-1507 Washington St. Rutland/Haven Sts. 450-452 Shawmut	19,491
RC-9	Washington/Rutland West Concord	49,232
RE-78	83-95 W. Springfield	40,920
33-B	75-87 Northampton	48,631
R-12A	1762-1788 Washington	
R-12B	91-113 Northampton	
29-A	1797-1815 Washington 140-150 Northampton	24,024
P-6A	1-67 E. Berkeley* Tremont/Shawmut Ave.	47,516
R-11C	6-14 E. Concord	7,947

DRAFT

For Discussion On







The roadway narrows again between Berkeley Street and Herald Street. Assuming a two-way Washington Street, the LRV can be accommodated by removing on-street parking or by widening the street. Washington Street can be widened in this section without dislocating any residents or businesses because the buildings are sufficiently set back from the street.

City actions to date in housing development along the corridor already incorporate these goals. Through the South End Neighborhood Housing Initiative (SENHI) the BRA will make parcels in this community available for housing development. During the first phase of the program, scheduled to begin in Fall 1986, the BRA will offer seven parcels along the Washington Street corridor (see table). Some 400-500 units will be produced on these key parcels; about half of these will be affordable to low- and moderate-income families.

#### 4.3.1 Recommended State Actions

The state should participate in the areas of housing subsidies, small-business assistance, and off-street parking, as follows.

- o In the commercial districts, financially assist in the redevelopment of publicly owned parcels for commercial uses and where appropriate housing on upper floors. These include parcels R-12U, 29A, and Se-70 in the Massachusetts Avenue area and parcels 31 and P6A in the East Berkeley Street area.
- o Provide financial assistance to construct parking facilities along Washington Street for the use of store patrons.
- o Provide loans or grants to help businesses remain viable and stay competitive in a changing market.
- o Participate in affordable housing programs through interest reduction, equity loans for down payments, rental housing programs, public housing programs, and technical assistance to non-profit housing development groups.
- o If the state takes properties in the Cathedral district, relocate affected businesses and residents in the Cathedral district and provide financial assistance. *If peak-hour pkg is prohibited, provide equiv off-st pkg*
- o Widen Washington Street to accommodate LRVs between Berkeley Street and Herald Road.



#### 4.4 Dudley Station

The relocation of the Orange Line will cause Dudley Square to lose its long-time function as a transportation node and will substantially reduce its role as a commercial center. The demolition of the elevated structure, the reconstruction of Washington Street, and construction associated with replacement service will further disrupt the Dudley area for the next few years.

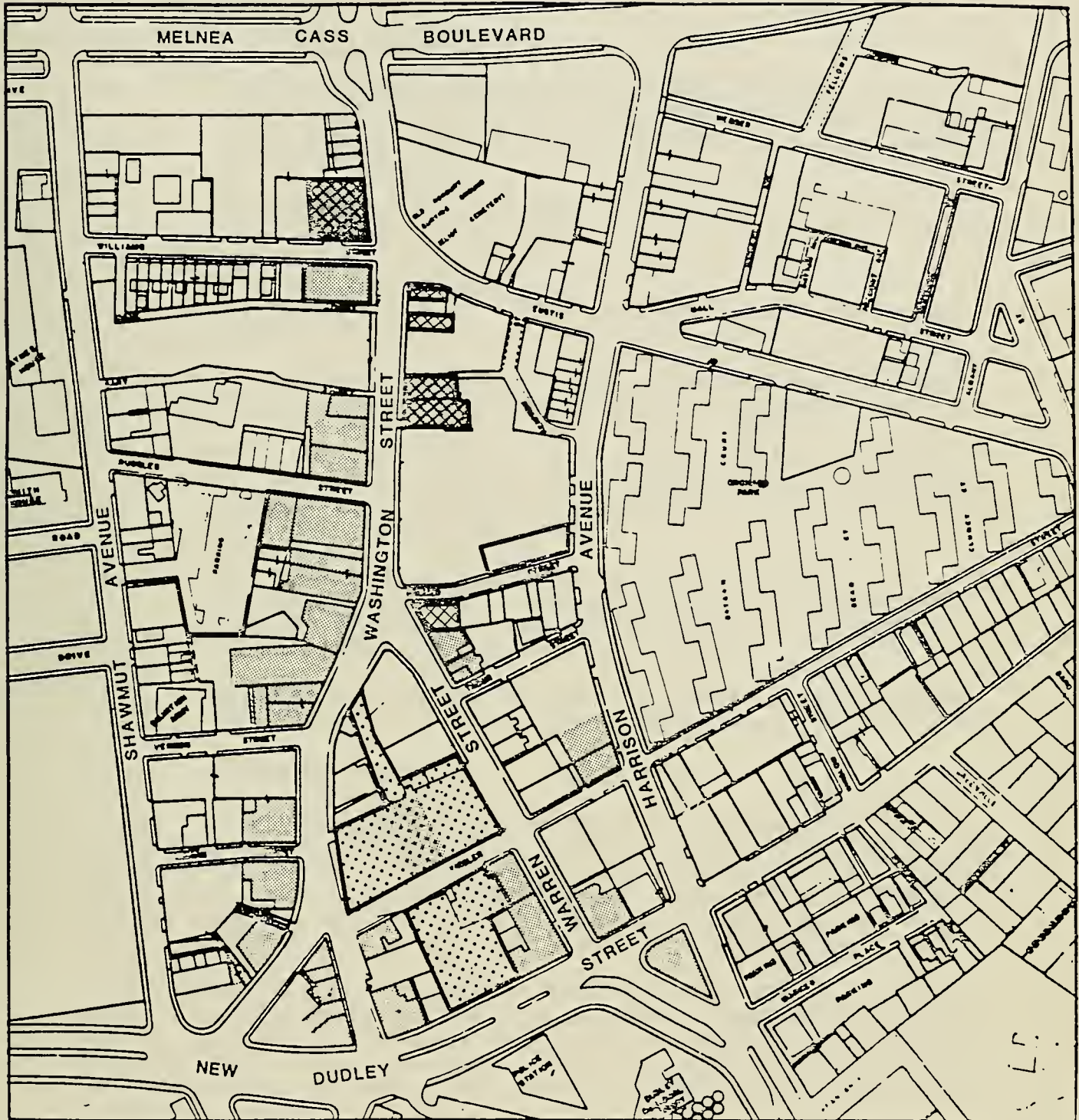
Dudley represents the southernmost terminus of the proposed replacement service route. Consequently, fast and reliable service--comparable to the Orange Line--is an important factor. LRVs would provide faster and more efficient service than buses. In addition, LRV service to Dudley Square would open the possibility of future expansion to Mattapan along Blue Hill Avenue or Warren Street. However, the MBTA would need to relocate five businesses in Dudley Square in connection with widening Washington Street and making transportation improvements (see map): Highland Tap (Alex's), Tropical Foods, Hamill's Studio, Chaparral Building, and the Clothing Store.

But regardless of the transit alternative chosen, in the short run parking will be critical to Dudley's survival as a commercial district. Lack of adequate parking has already caused extensive illegal parking in Dudley Square. When the MBTA relocates the Orange Line and reroutes a number of bus routes to Ruggles Station, Dudley businesses will depend even more heavily on automobile traffic, at least until replacement service begins. In the short run, establishing off-street parking at the former Blair's Market will serve some of these immediate needs. But providing additional attractive, well-lit, and secure parking areas will help retain business confidence in this area during the transition and in the long run.

The state owns a number of parcels in this area that can be developed for housing and commercial uses. The MBTA Bartlett Yard can be developed as housing, while the Dudley Station and a number of parcels near Melnea Cass Boulevard and Massachusetts Avenue could be developed for commercial uses.



# DUDLEY SQUARE



PROPERTY TAKINGS WHEN STREETS WIDENED



MBTA-OWNED PROPERTY



DUDLEY NATIONAL HISTORIC DISTRICT BUILDINGS

*Omit these*

## DUDLEY SQUARE NATIONAL HISTORIC DISTRICT



#### 4.4.1 Recommended State Actions

- o Fund a business assistance program to help merchants reposition their business, to compete in the changed market and to aid their operations during demolition and construction.
- o Provide financial support to construct an interim parking facility, possibly at the former Blair's store site.
- o Reconstruct Dudley Street between Warren Street and Dudley Square.
- o Provide accommodation in Dudley Square for businesses that may be dislocated due to MBTA property takings.
- o Make state-owned parcels available to the city for development including Dudley Station and sites along Melnea Cass Boulevard for commercial uses and the MBTA Bartlett Yard for housing.
- o Increase funding for Roxbury Heritage Park to complement business development in Dudley Square through facade improvement, sidewalk and lighting improvements, and pedestrian arcades.
- o Provide assistance for developing affordable housing on parcels in the Washington Park Urban Renewal area.

#### 4.5 Egleston Square

As the major commercial district along Washington Street between Dudley Square and Forest Hills, Egleston Square stands to be severely hurt by the Orange Line relocation. Neither the relocated Orange Line nor the proposed replacement service will run through the district. As a result, Egleston Square will depend almost entirely upon automobile and pedestrian traffic.

While removing the Orange Line will make some on-street spaces available, this area has limited parking. Developing several near-by parcels for shopper and commuter parking could link Egleston Square with the new Orange Line stop at Jackson Square to create a major commercial district along this stretch of Columbus Avenue.



4.5.1 Recommended State Actions

- o Provide flexible assistance to area businesses.
- o Develop parking facilities for commuters and shoppers.
- o Monitor demolition of present Orange Line station and capital improvements to ensure minimal disruption of businesses during construction period.

4.6 Forest Hills

As the southernmost stop on the new Orange Line, Forest Hills will face enormous demands for commuter parking. The MBTA has scaled back its original plans for a 1000-space garage on the site due to opposition from this primarily residential community. Present plans, which call for 150-200 new spaces, will likely prove inadequate as local businesses are likely to suffer if commuters take all the parking spaces.

The demolition of the old Forest Hills Orange Line station will create serious problems for area merchants and traffic management.

4.6.1 Recommended State Actions

- o Work with the MBTA and community to reopen discussions about construction of a more extensive parking facility.
- o Provide small business assistance to merchants in the area.



# Action Plan



5.0 WASHINGTON STREET CORRIDOR ACTION PLAN (WASHCAP)

5.1 Replacement Service Recommendations

- o Mode: LRV

5.2 Corridor-wide Recommended State Actions

- o Participate in affordable housing programs through interest reduction, equity loans for down payments, rental housing programs, public housing programs, and technical assistance to nonprofit housing development groups.
- o Provide financial and technical assistance to small businesses to help them remain viable and stay competitive in a changing market.
- o Provide financial assistance for constructing parking facilities at commercial districts and MBTA stations.
- o Minimize disruption during Orange Line demolition and Washington Street reconstruction.

5.3 Chinatown: Recommended State Actions

- o Address the impacts of LRV tunnel encroachment upon Parcel R-7.
- o Address the impacts of land-takings associated with Washington Street surface option.
- o Make improvements to Elliot Norton Park.
- o Provide better transit access between Chinatown and the manufacturing jobs at Boston Marine Industrial Park.
- o Minimize construction impacts on the community.

5.4 Turnpike Crossings: Recommended State Actions

- o Facilitate air-rights development over the turnpike by developing plans that incorporate LRV tracks.



- o Develop engineering plans that minimize the negative impacts of LRVs on air-rights development, particularly noise and vibrations.
- o Redesign Washington Street Bridge to carry two-way traffic.

5.5 South End: Recommended State Actions

- o Provide financial assistance to develop public parcels for commercial uses and, where appropriate, housing on upper floors, specifically parcels R-12U, 29A, and SE-70 in the Massachusetts Avenue area and parcels 31 and P6A in the East Berkeley Street area.
- o Widen Washington Street between Berkeley and Herald Streets to accommodate LRVs, and two moving and one parking lane in each direction.

5.6 Dudley Square: Recommended State Actions

- o Relocate five businesses displaced in connection with widening Washington Street and making transportation improvements: Highland Tap (Alex's), Tropical Foods, Hamill's Studio, Chaparral Building, and the Clothing Store.
- o Construct an interim off-street parking facility at the Blair's site.
- o Make state-owned parcels available to the City for development, including Dudley Station and sites along Melnea Cass Boulevard for commercial uses and the Bartlett MBTA yard for housing.
- o Expand the role of Roxbury Heritage Park to enhance commercial activity in Dudley Square.

5.7 Egleston Square: Recommended State Actions

- o Develop parking for shoppers and commuters along Columbus Avenue to link this commercial district with the new Orange Line station at Jackson Square.

5.8 Forest Hills: Recommended State Actions

- o Work with the MBTA and community to reopen discussions about constructing a more extensive parking facility for city resident commuters driving to the Orange Line.



WASHINGTON STREET CORRIDOR NEIGHBORHOOD IMPACT ANALYSIS

12 September 1986

AGENDA

- 
1. Review draft report
  2. Identify requirements for mayoral briefing - *add SW Corr.*
  3. Determine next steps for completing report

3561t



# WASHINGTON STREET CORRIDOR NEIGHBORHOOD IMPACT ANALYSIS

## MAJOR POLICY ISSUES

### Replacement service alternatives

- o LRVs would carry about two to three times as many riders as buses. *-adv. & dis adv. - unclear - up side down*
- o LRVs are faster than buses.
- o LRVs connect directly with the subway system at the Boylston Green Line station. Bus riders transferring to the subway would pay an additional fare.
- o LRVs cost less to operate. Costs per rider (net operating cost plus amortized capital costs) range from \$1.80 to \$2.21 for LRVs compared to \$1.55 to \$3.40 for buses.
- o LRV service to Dudley opens the possibility of extending the line south to Mattapan.
- o LRV service requires construction along the route, causing disruption for another year or two.
- o LRVs could require some property takings in Chinatown and Dudley Square and limit the development potential of several parcels in the Chinatown area.

### Orange Line elevated structure demolition

- o Demolition will generate noise, dirt, dust, and vibrations.
- o Demolition will disrupt pedestrian and vehicle circulation.

### Washington Street reconstruction

- o Road work will generate noise, dirt, dust, and vibrations.
- o Reconstruction will disrupt pedestrian and vehicle circulation.
- o Redesigning the Washington Street Bridge over the Massachusetts Turnpike to carry two-way traffic would provide additional southbound capacity.



### Parking

- o Off-street parking in commercial districts will help revitalize corridor.
- o Off-street parking at MBTA stations can help encourage increased use of transit, particularly among downtown commuters.
- o Expanding the resident parking program as necessary will help neighborhoods facing competition from commuters and shoppers.

### Housing

- o Removing the blighting influence of the elevated Orange Line structure will cause property values to rise, threatening long-term and low- and moderate-income residents with displacement.

### Economic Development

- o Short-term construction disruption may threaten the survival of existing small businesses.
- o Inadequate parking in commercial districts may discourage shoppers.
- o Long-term revitalization of the corridor may cause rents to rise and require existing merchants to make capital improvements to stay competitive.



## WASHINGTON STREET CORRIDOR NEIGHBORHOOD IMPACT ANALYSIS

### Recommended City and State Actions

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#### Replacement Service Alternative

- o Support LRV option based on greater ridership, faster service, direct connections to central subway, and lower operating costs.

#### Demolition Management

- o Place an MBTA official in the field to monitor contract compliance and act on citizen complaints.
- o Identify detours clearly and provide traffic control officers to manage vehicular and pedestrian traffic.
- o Ensure safe conditions and access for pedestrians, businesses, residents, and emergency vehicles.
- o Provide financial assistance to the Mayor's Office of Neighborhood Services to underwrite the costs of dealing with citizen complaints about demolition activities.

#### Washington Street Reconstruction

- o Enter a written contract with the City that establishes a role for the City, neighborhood residents, and area businesses in planning the street design and a construction management plan.
- o Use urban design standards for street reconstruction and carry these improvements into intersecting streets.
- o Formalize an agreement with the MBTA on allocating \$10 million for capital improvements on Washington Street between Forest Hills and Dudley Square and start reconstruction as soon as possible.
- o Redesign and reconstruct the Washington Street bridge to carry two-way traffic.



### Parking

- o Allocate a portion of state off-street parking funds to pay for lots at major commercial districts and MBTA stations.
- o Reopen discussions about a park-and-ride facility in Forest Hills.
- o Provide secure, well-lit off-street parking in commercial districts along the corridor.
- o Expand the resident parking program if necessary in neighborhoods facing competition from commuters and shoppers.

### Housing

- o Target city-owned parcels in the corridor for low- and moderate-income housing, gardens, and open space.
- o Commit state housing subsidy resources to parcels in the corridor to ensure affordability on new construction or rehabilitation projects.

### Economic Development

- o Allocate a major share of \$7.5 million in state commercial stabilization funds to the businesses along the corridor.
- o Expand the Roxbury Heritage Park project to complement business development in Dudley Square through pedestrian arcades and facade, sidewalk and lighting improvements.



## WASHINGTON STREET CORRIDOR ACTION PLAN

Replacement service will pass through Roxbury, the South End, Chinatown, and possibly parts of downtown Boston. Residents of each neighborhood have a different set of concerns. Following are the major location-specific land-use and development impacts of replacement service from Chinatown to Forest Hills.

### o Chinatown

- o Address the impacts of LRV tunnel encroachment upon Parcel R-7.
- o Address the impacts of land-takings associated with Washington Street surface option.
- o Make improvements to Elliot Norton Park.
- o Provide better transit access between Chinatown and the manufacturing jobs at Boston Marine Industrial Park.
- o Minimize construction impacts on the community.

### o Turnpike Crossings

- o Facilitate air-rights development over the turnpike by developing plans that incorporate LRV tracks.
- o Develop engineering plans that minimize the negative impacts of LRVs on air-rights development, particularly noise and vibrations.
- o Redesign Washington Street Bridge to carry two-way traffic.

### o South End

- o Provide financial assistance to develop public parcels for commercial uses and, where appropriate, housing on upper floors, specifically parcels R-12U, 29A, and SE-70 in the Massachusetts Avenue area and parcels 31 and P6A in the East Berkeley Street area.
- o Widen Washington Street between Berkeley and Herald Streets to accommodate LRVs, and two moving and one parking lane in each direction.



o Dudley Square

- o Relocate five businesses displaced in connection with widening Washington Street and making transportation improvements: Highland Tap (Alex's), Tropical Foods, Hamill's Studio, Chaparral Building, and the Clothing Store.
- o Construct an interim off-street parking facility at the Blair's site.
- o Make state-owned parcels available to the City for development, including Dudley Station and sites along Melnea Cass Boulevard for commercial uses and the Bartlett MBTA yard for housing.
- o Expand the role of Roxbury Heritage Park to enhance commercial activity in Dudley Square.

o Egleston Square

- o Develop parking for shoppers and commuters along Columbus Avenue to link this commercial district with the new Orange Line station at Jackson Square.

o Forest Hills

- o Work with the MBTA and community to reopen discussions about constructing a more extensive parking facility for city resident commuters driving to the Orange Line.



# WASHINGTON STREET CORRIDOR NEIGHBORHOOD IMPACT ANALYSIS

## FACT SHEET

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### Washington Street Replacement Service

- o In the year 2000, LRVs are expected to carry about 9000 passengers per day. Bus ridership estimates range from 2300 to 5000.
- o The trip from Dudley to downtown would take about 12 minutes for the light-rail alternative and 18-23 minutes for the bus alternatives
- o Capital costs for bus alternatives are \$13-14 million, including \$11 million for road reconstruction.
- o Capital costs for LRV alternatives range from \$39 million for surface routes to \$49 million for a tunnel and a new bridge. Costs include \$7 million for road reconstruction.
- o Bus service operating costs run from 46¢ to \$1.45 per rider. LRVs would cost 30¢ per passenger to operate.

### Timetable

- o Relocated Orange Line service will begin in Spring 1987.
- o Demolition of the elevated structure will begin as soon as the Orange Line is relocated and last for nine months.
- o The MBTA will issue a draft Environmental Impact Statement in November 1986. A 45-day comment period, including a public hearing, will follow. The MBTA will submit a final EIS and a preferred alternative in March 1987.
- o Bus service could begin in 1988. LRVs would begin running in 1990.



### Funding

- o About \$30 million is available in federal interstate transfer funds to cover reconstruction and road work from Dudley Square to Chinatown.
- o Federal funds will cover up to 80 percent of the project costs. State funding would cover the rest.

### Displacement

- o Replacement service will displace five businesses in Dudley Square.
- o LRV service could require widening Washington Street near the Cathedral of the Holy Cross. Seven buildings with businesses and housing could be displaced.
- o The Washington Street surface LRV alignment could interfere with plans to develop housing on Parcel R-3/R-3A in Chinatown.
- o The Tremont Street tunnel LRV option could encroach upon Parcel R-7 in Chinatown.
- o Plans for LRV turnpike crossing could affect air-rights development.









